

CASE OF JACKSONIAN EPILEPSY, THE RESULT OF
AN OLD DEPRESSED FRACTURE OF THE
SKULL, RELIEVED BY TREPHINING.

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THE patient, F. T., age 19, height 5 feet 4½ in., weight 112 lbs., a pale, delicate, nervous looking youth, consulted me for epileptic attacks on the 10th of July, 1890, giving the following history :

Family History—Good, no nervous specific or rheumatic trouble ever known in family.

Previous History—Always enjoyed excellent health until October, 1883, when, while picking nuts, he fell a distance of about 15 feet, striking the right side of his head on a stone, thus cutting the scalp. He was unconscious for three or four minutes, then got up and walked home, a distance of one mile. He went to a surgeon's office, who stitched up the wound and sent him to bed, where he remained a week. Pus was discharged from the wound during this time and the patient suffered considerable pain, which was intensified by light and sounds. On about the ninth day the patient was allowed up as he appeared much better. After being up an hour, however, he had a convulsion. He was placed in bed and the surgeon sent for, who, ten days later, removed several small pieces of bone from the skull beneath the site of the original wound. The patient improved and in six weeks was able to walk around and then to work. The following spring he appeared quite well, but his left arm was not quite so strong as formerly.

Two years later, patient noticed a twitching in the index finger, which extended to the other fingers and thumb of the left hand. This twitching at first lasted about one minute and was accompanied by pain which would almost make him cry out. One attack was followed quickly by another, the fingers being suddenly and violently flexed. These attacks would come on at any time, one, two or more occurring in a month. This condition became gradually worse during a period

of four years, until June, 1889, when, after playing ball one day, the patient felt a peculiar feeling in his head, followed by a violent flexion of the left forearm, together with great pain in the muscles of the whole upper extremity. He then became unconscious and remained in that condition for 8 or 10 minutes. He recovered from this attack in a few minutes and remained well until a second attack, which occurred two weeks later. This time he was conscious, but all of the muscles of the left side were affected. After this the patient could not leave his house with safety as an attack might come on at any time, but during the cold weather he improved, although his appetite was poor. He had frequent nocturnal emissions and became very nervous. Every two or three weeks he would have a severe attack, which invariably commenced in the fingers of the left hand, extended up the arm to face and down the leg of same side. The tonic spasms were succeeded by clonic ones, and at times the whole body was thrown into convulsions, in fact this became the rule.

On 28th June, 1890, the patient had a very bad attack, the convulsions were general, and was followed by unconsciousness which lasted an hour. Since then until 23rd July they were only light attacks. His intellect was much dulled after an attack. He always had an aura in the form of a scum before his eyes, followed by giddiness, etc.

Present Condition—The patient is a pale, nervous, intelligent looking boy with poorly developed muscular system. Lungs expand fairly well, basic systolic murmur heard over pulmonary area. No organic disease of heart or lungs. Eyesight good, fundi normal. Over the lower part of motor area, on the right side of head, is a crucial cicatrix, and it gives the patient pain when pressure is made over this region. There appears to be some depression here. The muscles of the left side are weaker than normal and there is a difference of 2 cm. between the measurements of the two sides. Sensation normal.

From the 23d to 27th July patient had about twenty epileptic attacks, some of which were very violent.

July 27, 1890. Patient prepared for operation in usual way, head shaved and cleaned with soap and water, alcohol, etc. It was quite evident after the head had been shaved that there was depression of the skull beneath the old cicatrix.

July 28. Patient given one-sixth gr. morph. sulph. hypodermically and chloroformed, a curved incision made commencing three-fourth inch behind and one-half inch above the external angular process of the right frontal bone, curved upwards to parietal eminence then backwards for about three inches, then down to a point a little

above the ear. This flap, marked in the centre by the old crucial cicatrix, was then reflected, everything being separated from the bone except periosteum, and the vessels caught with hæmostatic forceps. There was then exposed a thick fibrous membrane, three-fourths of an inch square, which bridged over the opening made in the skull at the previous operation, seven years before. The periosteum was now separated from the edges of the opening in the skull and the bone was found depressed for an area of about three-fourths of an inch around the original opening. The thick membrane which filled up the opening was separated and about 4 cc. of serous fluid escaped. This fluid was localized between the membrane and dura mater. On completing the separation of this membrane from the bone, considerable blood welled from some of the divided branches of the middle meningeal artery. The dura mater was separated sufficiently from the skull and the depressed portion removed with bone forceps. There was considerable hemorrhage. The dura mater was divided and cut vessels tied with fine gut with the exception of one bleeding point at the upper and front part of the wound between the dura mater and bone, which had to be stopped by plugging with a small piece of sponge. The brain exposed presented a healthy appearance, except a point corresponding to about the middle portion of the ascending frontal convolution, which was somewhat darker in color and slightly depressed. The bleeding having been all checked, the dura mater was drawn together with a continuous catgut suture. The pieces of bone which had been kept after removal in a warm solution of acid boracic were replaced, lying on the dura mater, all the small pieces being fitted in between the larger ones. Two small gut drains placed in with strands spread among the fragments of bone, flap replaced and stitched accurately, except a short distance at the lower and back part of the wound where drain escaped, completed the operation. The regular moist dressing of bichloride gauze and sterilized cotton was applied and patient placed in bed. Time, forty minutes.

The temperature was taken every six hours, and the highest point it reached was 101 degrees F. nine hours after operation. Urine was removed, once by catheter, evidently the effect of the hypodermic. He was given some potassium bromide for two nights following.

Aug. 2. There was a little twitching in his arm, dressed wound, removed all of the stitches, healed nicely except point where gut drain escaped. There seemed a little fulness beneath flap and hence a director was passed in alongside of drain and about fifteen drops of serum escaped. The patient felt better, slept well and had a good appetite. He was allowed to sit up on the seventh day, and walked

half a block on the eighteenth. He gained flesh rapidly, and soon appeared like another person. No bone ever came away. He entered the City hospital on the 23d of August, and answered door and telephone. In October he had a slight attack of pleuritis. He had a slight fit in November, but had been working hard collecting accounts.

I saw the patient frequently during the year 1891. He worked steadily, but about every two months he would have a slight epileptic attack, and on one occasion when attending a circus on a hot day and in a big crowd, he had a severe attack. Since that time he married and has been in steady employment as bartender. He informed me a few days ago that he occasionally has a slight attack. It is now two years and nearly three months since operation.